

the behavior of the yellow one. The latter is reported by Stearn as germinating self-sown around the parent clumps at Kew and at Glasnevin. Even when growing under the same conditions, *Lysichitum camtschaticense* begins to grow and flower a month later than *Lysichitum americanum*.

The odor of the plants is a matter of interest. Hultén describes the Kamchatka plant as odorless (from memory, according to Stearn). The white-spathed plant at Kew likewise has no scent. Upon comparing fresh material from Glasnevin and from Captain Simpson-Hayward's garden, Stearn found both yellow and white equally redolent, "the odour of the white plant being sweeter and more pleasant than the skunk-like reek of the yellow". This is surprising if, as believed, the Glasnevin plant is a clone from the Kew plant.

Our skunk cabbage grows in swampy woods or in cut-over woodlands, and the same can be said of the Asiatic species. In Kamchatka it usually occurs in *Alnus hirsuta* swamps; only occasionally was it observed, by Hultén, in a cut-over *Betula* forest.

Lysichitum camtschaticense is found from the Kamchatka peninsula southwards along the Kurile islands and Sachalin to the Hokkaido (Yeso) and Japan proper (Honschu), and on the Asiatic mainland in Primorskaya, near the mouth of the Amur river. *Lysichitum americanum* occurs in Alaska, British Columbia, Washington, Idaho, Oregon, Montana and California.

The observations of these several authors clearly indicate that the Asiatic and American species have been confused through similarity of habit and through difficulty of preservation. Both morphological and physiological characteristics afford evidence of the distinctness of these plants. The facts of geographic distribution are also in accord; one species, *Lysichitum camtschaticense*, is strictly Asiatic, the other, *Lysichitum americanum*, is limited to the Pacific Coast of North America.

University of California, Berkeley, Sept. 21, 1933.

PINUS FLEXILIS IN THE UPPER KERN RIVER WATERSHED

RIMO BACIGALUPI

While on the annual summer "High Trip" with the Sierra Club, the writer came upon a somewhat extensive colony of *Pinus flexilis* along the lower reaches of Whitney Creek about one and a half miles below Lower Crabtree Meadow. So far as ascertainable, this species has not heretofore been authentically reported from the western slope of the Sierra Nevada. G. B. Sudworth, in his "Forest Trees of the Pacific Slope", reports it as occurring "along south side of South Fork of Kings River, at 10,500 to 12,000 feet." In the summer of 1928 and again during that of 1932, the writer attempted to verify this record of its occurrence on the Kings River watershed. The regions visited, all within or about the altitudinal range cited by Sud-

worth, are as follows: eastern slopes of Avalanche Peak, north and east slopes of Sphinx Crest, headwaters of Sphinx Creek, portions of the watershed of East Creek, base of East Vidette, slopes about Center Basin and Foresters' Pass. *Pinus Balfouriana*, *Pinus monticola* and *Pinus albicaulis* were frequently encountered, while search for *Pinus flexilis* met with no success. It is not unlikely that Sudworth obtained his data from a forest ranger who might easily have mistaken either *Pinus monticola* or *Pinus albicaulis* for *Pinus flexilis*.

The colony of *Pinus flexilis* seen on Whitney Creek is composed of young, slender, healthy individuals perhaps twenty-five to thirty feet tall. Associated species of *Pinus*, of about the same vigor and height, are *Pinus Balfouriana* and *Pinus monticola*. This young and vigorous forest grows on the shady south slope of Whitney Creek, at an elevation of 9800 feet, just below the point where the canyon becomes steep and narrow as it begins to cut its way through the wall of the Kern River Canyon. Below this point, *Pinus flexilis* occurs at intervals on both sides of the gorge, but here it is a gnarled and stunted tree. The last trees were seen, associated with *Pinus ponderosa* var. *Jeffreyi*, at the mouth of Whitney Canyon, at an elevation of about 8000 feet, hardly 100 feet up on the wall of the Kern River Canyon.

Mature cones, as well as branch-tips with young cones still attached, were collected. The specimens are deposited in the Dudley Herbarium of Stanford University (Bacigalupi, no. 2225).

Dudley Herbarium, Stanford University,
January 20, 1933.

THE MONTEREY CYPRESS GROVE OF POINT LOBOS

Of all relict plant endemics along the Californian coast, *Cupressus macrocarpa* is one of the most interesting and significant in relation to the geological history of the Californian shore line. As is well known it occurs in only two small clusters on the ocean headlands at either side of the Carmel River mouth. It is with a sense of humiliation for California that the botanist observed the cutting up of the Point Cypress grove into building lots. On the other hand it is regarded as doubly fortunate that the remaining Point Lobos grove, still in its natural state, has been purchased in part by the State Park Commission for the state system of parks in California.

This important objective has, however, not been fully realized and the state has called upon the Point Lobos Association to raise an additional sum of nearly fifty thousand dollars. The President of the Association is Mrs. Caroline Phelps Stokes Hunter, the Treasurer is Mr. William H. Crocker. Any sum, however small, may be sent to the Secretary of the Point Lobos Association, 114 Sansome Street, San Francisco and will be acknowledged.—W. L. JEPSON.